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(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.



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WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1-43, or 87-129, a mature protein coding portion of SEQ ID NO: 1-43, or 87-129, an active domain coding portion of SEQ ID NO: 1-43, or 87-129, and
5 complementary sequences thereof.
2. An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide hybridizes to the polynucleotide of claim 1 under stringent hybridization conditions.
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3. An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide has greater than about 90% sequence identity with the polynucleotide of claim 1.
4. The polynucleotide of claim 1 wherein said polynucleotide is DNA.
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5. An isolated polynucleotide of claim 1 wherein said polynucleotide comprises the complementary sequences.
6. A vector comprising the polynucleotide of claim 1.
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7. An expression vector comprising the polynucleotide of claim 1.
8. A host cell genetically engineered to comprise the polynucleotide of claim 1.
- 25 9. A host cell genetically engineered to comprise the polynucleotide of claim 1 operatively associated with a regulatory sequence that modulates expression of the polynucleotide in the host cell.
10. An isolated polypeptide, wherein the polypeptide is selected from the group consisting of:
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 - (a) a polypeptide encoded by any one of the polynucleotides of claim 1; and
 - (b) a polypeptide encoded by a polynucleotide hybridizing under stringent conditions with any one of SEQ ID NO: 1-43, or 87-129.
11. A composition comprising the polypeptide of claim 10 and a carrier.
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12. An antibody directed against the polypeptide of claim 10.
13. A method for detecting the polynucleotide of claim 1 in a sample, comprising:
- a) contacting the sample with a compound that binds to and forms a complex with the polynucleotide of claim 1 for a period sufficient to form the complex; and
 - b) detecting the complex, so that if a complex is detected, the polynucleotide of claim 1 is detected.
14. A method for detecting the polynucleotide of claim 1 in a sample, comprising:
- a) contacting the sample under stringent hybridization conditions with nucleic acid primers that anneal to the polynucleotide of claim 1 under such conditions;
 - b) amplifying a product comprising at least a portion of the polynucleotide of claim 1; and
 - c) detecting said product and thereby the polynucleotide of claim 1 in the sample.
15. The method of claim 14, wherein the polynucleotide is an RNA molecule and the method further comprises reverse transcribing an annealed RNA molecule into a cDNA polynucleotide.
16. A method for detecting the polypeptide of claim 10 in a sample, comprising:
- a) contacting the sample with a compound that binds to and forms a complex with the polypeptide under conditions and for a period sufficient to form the complex; and
 - b) detecting formation of the complex, so that if a complex formation is detected, the polypeptide of claim 10 is detected.
17. A method for identifying a compound that binds to the polypeptide of claim 10, comprising:
- a) contacting the compound with the polypeptide of claim 10 under conditions sufficient to form a polypeptide/compound complex; and
 - b) detecting the complex, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.
18. A method for identifying a compound that binds to the polypeptide of claim 10, comprising:

a) contacting the compound with the polypeptide of claim 10, in a cell, under conditions sufficient to form a polypeptide/compound complex, wherein the complex drives expression of a reporter gene sequence in the cell; and

b) detecting the complex by detecting reporter gene sequence expression, so that if the polypeptide/compound complex is detected, a compound that binds to the polypeptide of claim 10 is identified.

19. A method of producing the polypeptide of claim 10, comprising,

a) culturing a host cell comprising a polynucleotide sequence selected from SEQ ID NO: 1-43, or 87-129, a mature protein coding portion of SEQ ID NO: 1-43, or 87-129, an active domain coding portion of SEQ ID NO: 1-43, or 87-129, complementary sequences thereof and a polynucleotide sequence hybridizing under stringent conditions to SEQ ID NO: 1-43, or 87-129, under conditions sufficient to express the polypeptide in said cell; and

b) isolating the polypeptide from the cell culture or cells of step (a).

20. An isolated polypeptide comprising an amino acid sequence selected from the group consisting of any one of the polypeptides SEQ ID NO: 44-86, or 130-172, the mature protein portion thereof, or the active domain thereof.

21. The polypeptide of claim 20 wherein the polypeptide is provided on a polypeptide array.

22. A collection of polynucleotides, wherein the collection comprising the sequence information of at least one of SEQ ID NO: 1-43, or 87-129.

23. The collection of claim 22, wherein the collection is provided on a nucleic acid array.

24. The collection of claim 23, wherein the array detects full-matches to any one of the polynucleotides in the collection.

25. The collection of claim 23, wherein the array detects mismatches to any one of the polynucleotides in the collection.

26. The collection of claim 22, wherein the collection is provided in a computer-readable format.

27. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.

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28. A method of treatment comprising administering to a mammalian subject in need thereof a therapeutic amount of a composition comprising an antibody that specifically binds to a polypeptide of claim 10 or 20 and a pharmaceutically acceptable carrier.



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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be recorded to ensure the integrity of the financial data. This includes not only sales and purchases but also expenses and income. The document further states that regular audits are necessary to verify the accuracy of these records and to identify any discrepancies.

In the second part, the focus shifts to the management of cash flow. It highlights the need for a clear understanding of the company's current financial position and the ability to forecast future cash requirements. The document suggests implementing a system of budgeting and monitoring cash flow to avoid liquidity issues. It also mentions the importance of maintaining a healthy relationship with creditors and suppliers to ensure timely payments and favorable terms.

The third part of the document addresses the issue of taxation. It provides an overview of the various tax obligations that a business may face, including income tax, sales tax, and property tax. The document advises consulting with a tax professional to ensure compliance with all applicable laws and regulations. It also discusses strategies for minimizing tax liability through legitimate means, such as claiming deductions and credits.

Finally, the document concludes with a section on financial reporting. It stresses the importance of providing accurate and timely financial statements to stakeholders, including investors, lenders, and management. The document outlines the key components of these reports, such as the balance sheet, income statement, and cash flow statement, and provides guidance on how to prepare them effectively.

ctc aca gac ctg gct ctc agt tct acc act gtg ccc aag atg ctg gcc Leu Thr Asp Leu Ala Leu Ser Ser Thr Thr Val Pro Lys Met Leu Ala 225 230 235	840
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 <211> 469
 <212> PRT
 <213> Homo sapiens

<400> 54
 Met Thr Ser Pro Val Leu Val Asp Ile Arg Glu Glu Val Thr Cys Pro
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 Ile Cys Leu Glu Leu Leu Thr Glu Pro Leu Ser Ile Asp Cys Gly His
 20 25 30
 Ser Phe Cys Gln Ala Cys Ile Thr Pro Asn Gly Arg Glu Ser Val Ile
 35 40 45
 Gly Gln Glu Gly Glu Arg Ser Cys Pro Val Cys Gln Thr Ser Tyr Gln
 50 55 60
 Pro Gly Asn Leu Arg Pro Asn Arg His Leu Ala Asn Ile Val Arg Arg
 65 70 75 80
 Leu Arg Glu Val Val Leu Gly Pro Gly Lys Gln Leu Lys Ala Val Leu
 85 90 95
 Cys Ala Asp His Gly Glu Lys Leu Gln Leu Phe Cys Gln Glu Asp Gly
 100 105 110
 Lys Glu Lys Phe Gln Glu Ser Leu Lys Lys Leu Lys Asn Glu Glu Gln
 115 120 125
 Glu Ala Glu Lys Leu Thr Ala Phe Ile Arg Glu Lys Lys Thr Ser Trp
 130 135 140
 Lys Ala Arg Glu Thr Phe Ser Glu Asp Val Leu Gly Gln Glu Ser Trp
 145 150 155 160
 Gln Ser Thr Asn Ala Arg Glu Asn Ala Gly Ile Pro Gly Leu Glu Ala
 165 170 175



Ala His Phe Trp Ile Ala Ile Pro Phe Cys Ala Met Tyr Leu Val Ala
 180 185 190
 Leu Val Gly Asn Ala Ala Leu Ile Leu Val Ile Ala Met Asp Asn Ala
 195 200 205
 Leu His Ala Pro Met Tyr Leu Phe Leu Cys Leu Leu Ser Leu Thr Asp
 210 215 220
 Leu Ala Leu Ser Ser Thr Thr Val Pro Lys Met Leu Ala Ile Leu Trp
 225 230 235 240
 Leu His Ala Gly Glu Ile Ser Phe Gly Gly Cys Leu Ala Gln Met Phe
 245 250 255
 Cys Val His Ser Ile Tyr Ala Leu Glu Ser Ser Ile Leu Leu Ala Met
 260 265 270
 Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr Thr
 275 280 285
 Ile Leu Asn His Ala Val Ile Gly Arg Ile Gly Phe Val Gly Leu Phe
 290 295 300
 Arg Ser Val Ala Ile Val Ser Pro Phe Ile Phe Leu Leu Arg Arg Leu
 305 310 315 320
 Pro Tyr Cys Gly His Arg Val Met Thr His Thr Tyr Cys Glu His Met
 325 330 335
 Gly Ile Ala Arg Leu Ala Cys Ala Asn Ile Thr Val Asn Ile Val Tyr
 340 345 350
 Gly Leu Thr Val Ala Leu Leu Ala Met Gly Leu Asp Ser Ile Leu Ile
 355 360 365
 Ala Ile Ser Tyr Gly Phe Ile Leu His Ala Val Phe His Leu Pro Ser
 370 375 380
 His Asp Ala Gln His Lys Ala Leu Ser Thr Cys Gly Ser His Ile Gly
 385 390 395 400
 Ile Ile Leu Val Phe Tyr Ile Pro Ala Phe Phe Ser Phe Leu Thr His
 405 410 415
 Arg Phe Gly His His Glu Val Pro Lys His Val His Ile Phe Leu Ala
 420 425 430
 Asn Leu Tyr Val Leu Val Pro Pro Val Leu Asn Pro Ile Leu Tyr Gly
 435 440 445
 Ala Arg Thr Lys Glu Ile Arg Ser Arg Leu Leu Lys Leu Leu His Leu
 450 455 460
 Gly Lys Thr Ser Ile
 465

<210> 55
 <211> 195
 <212> PRT
 <213> Homo sapiens

<400> 55
 Met Gly Arg Ala Arg Asp Ala Ile Leu Asp Ala Leu Glu Asn Leu Thr
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 Arg Glu Gly Tyr Gly Arg Ile Pro Arg Gly Ala Leu Leu Ser Met Asp
 35 40 45
 Ala Leu Asp Leu Thr Asp Lys Leu Val Ser Phe Tyr Leu Glu Thr Tyr
 50 55 60
 Gly Ala Glu Leu Thr Ala Asn Val Leu Arg Asp Met Gly Leu Gln Glu
 65 70 75 80
 Met Ala Gly Gln Leu Gln Ala Ala Thr His Gln Gly Ser Gly Ala Ala
 85 90 95
 Pro Ala Gly Ile Gln Ala Pro Pro Gln Ser Ala Ala Lys Pro Gly Leu
 100 105 110
 His Phe Ile Asp Gln His Arg Ala Ala Leu Ile Ala Arg Val Thr Asn
 115 120 125

